

Federal Communications Commission
Washington, DC
Attn: Interested Parties
Reference: 03-104 docket

My background was in electrical engineering, specifically as an antenna and propagation specialist. I participated in the design and construction of some of the largest military antenna systems for VLF and HF frequency ranges in the 1960's.

I am amazed that consideration is being given to the BPL program on this docket. Based on my knowledge of HF propagation and signal levels, I would project that use of the HF bands in the USA would be no longer possible. Signal levels as evidenced by ongoing measurements by interested parties would be devastating close to the power lines. Signals would also be radiated into the ionosphere likely with the potential for world wide disruption of shortwave radio, military, and amateur radio, and other uses of the HF spectrum. Amateur operators on a daily basis communicate over distances of thousands of miles with power levels in the milliwatt range and simple antennas. It would appear to me that the power lines would act as radiators even if steps were taken to prevent this. I am unsure what steps could be taken to prevent this as a matter of fact.

I think that the US Government could be sued by various organizations who use the HF bands, such as shortwave broadcast stations. Their expensive stations would be of little use after a period of time. The effect of thousands or even hundreds of thousands of radiating signals together would create a noise level of a magnitude never before experienced. I would worry about the use of Military HF communications systems. I know that the military does not have 100% confidence in satellite systems for every situation. I believe that their systems would be rendered useless.

I am especially surprised that the commission is pursuing this program at a time when most consumers have access to high speed internet service of some type. I know that I have DSL, Cable, and Satellite service all available. It appears from information I have seen that use of the internet has peaked and the level of interest in broadband for downloading movies, etc. is just not there. It appears to me that providing a fourth type of service would have much the same effect as deregulation of telephone transmission, electrical power, etc. have had. Everyone is losing money and struggling to survive because of the excessive capacity that exists.

I hope that the commission will have the foresight to delay this program, and have competent consulting firms (without ties to the power companies) analyze the impacts of this program. Perhaps, some foreign consulting firms could be retained from countries not yet involved, as it is definitely a worldwide problem that will impact them soon. Thanks for your consideration of these comments.

Richard Tucker